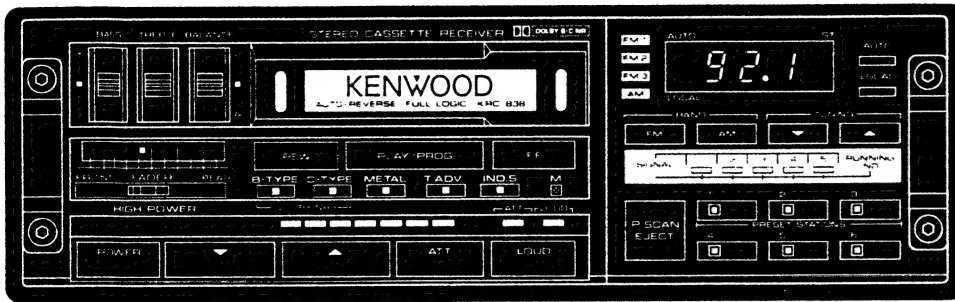# KENWOOD

Cassette receiver

KRC-838

Instruction manual

Take the time to read through this instruction manual. Familiarity with installation and operation procedures will help you obtain the best performance from your new cassette receiver.
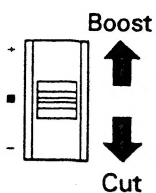
For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your KENWOOD dealer for information or service on this product.

Model KRC-838   Serial number _____

Controls and indicators

Bass, Treble control

Boost

Cut

Cassette tape slot

When a cassette is inserted, it is automatically fed in and loaded, and playback starts. Using the key off eject facility, if the ignition key is set to off, the cassette will be ejected.

Fast forward/Rewind switches

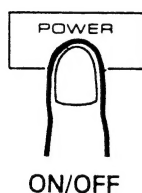Irrespective of the tape travel direction, each switch permits fast forward or rewind operation.

Fader control

Balances the sound level of the front and rear speakers in the case of a 4-speaker system.

FRONT   FADER   REAR

Front   Rear
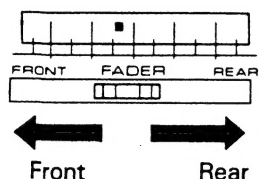
Power ON/OFF switch

When this switch is pressed ON, the display indicators light.

POWER

ON/OFF

Volume controls (△ UP/ ▽ DOWN)

Press the UP key (△) to increase the volume and DOWN key (▽) to decrease it. The volume changes by one step when the control is pressed once, and changes continuously when it is kept depressed.

Play/program switch

If this switch is depressed during playback, the tape travel direction is reversed and the corresponding indicator lights. If this switch is depressed during fast forward or rewind mode, the fast forward or rewind mode is released and the unit enters play mode.
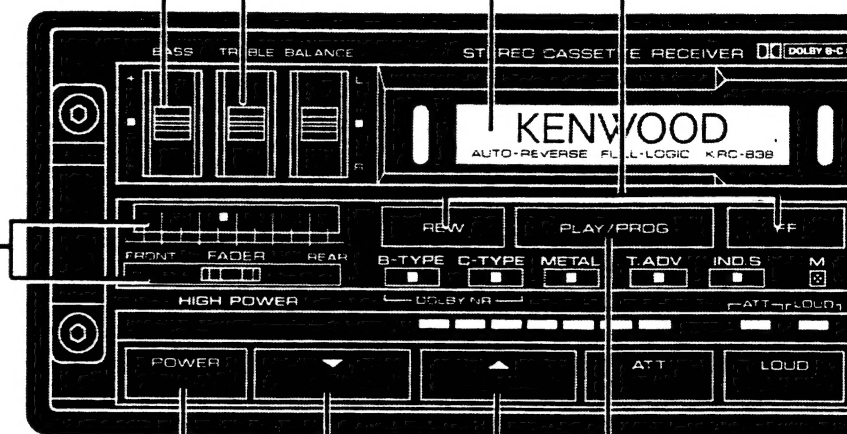
Metal switch (Tape selector)

Position for metal or chrome tape (70 μS)

Position for normal tapes (120 μS)

T.ADV switch (Tape advance)

This switch allows you to locate the beginning of the required selection. Set to on and fast forward or rewind the tape to quickly locate the required selection.

T.ADV   T.ADV

ON   OFF

Index scan switch

When this switch is set to on, the beginning of the selections is played back. When this switch is pressed again or the PLAY/PROG switch is pressed when the beginning of the desired selection is being played back, the unit enters the normal play mode.

IND.S   IND.S

ON   OFF

Memory switch

Used to store the received station in the channel key. When the switch is turned on, the switch illuminates for 5 seconds. During this 5 second interval, press the required channel key to store the received station frequency in the channel key.

Signal meter/Running indicator

Indicates the signal strength in tuner mode and tape travel direction in tape play mode. When the received signal weakens, the number of the lit indicators decreases. When the cassette tape is loaded with the A side facing up and the running indicator lights in the right direction, side A is being played back. When the running indicator lights in the left direction, side B is being played back. The speed of the lit indicators increases in FF/REW mode in the direction selected by the FF/REW button.

Balance control

LEFT

RIGHT
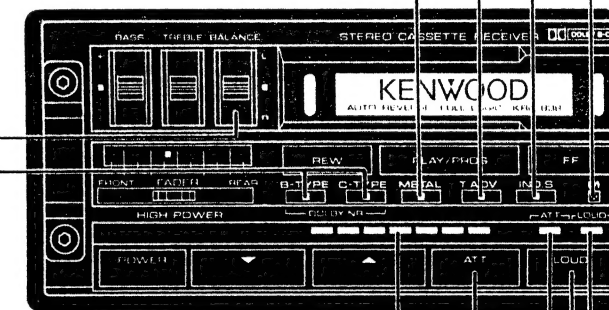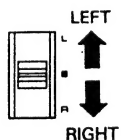
Dolby NR switches

Set for Dolby-B or Dolby-C type according to the tape used. When a switch is set to ON and the other switch is already set to ON, the switch which was ON is switched OFF.

ON   OFF

Volume level display

Indicates the output sound level.

Min   Max

Attenuator switch

When this switch is pressed ON, the indicator lights and the volume drops instanteneously. When this switch is pressed again, the indicator goes off and the previous volume resumes.

ATT   ATT

ON   OFF

Loudness switch

Push this switch to enhance low frequency response when listening to the unit at low volume.

LOUD   LOUD

ON   OFF

Band selector/ indicators
Selects FM or AM band. FM has three positions and each position can store 6 stations in memory. The indicator switches at the same time as the band is changed.

Digital display
Displays the frequency being received. A dot is displayed below ''ST'' on the upper right when an FM broadcast is received, below ''AUTO'' on the upper left when the AUTO switch is ON, and above ''LOCAL'' on the bottom left when the LOCAL switch is ON.

Auto/Manual selector
Use to select the tuning mode of auto (seek) or manual.

Local switch
When this switch is set to ON in tuner mode, interference, distortion and noise are reduced in a strong signal area. When seek tuning is carried out with this switch set to ON, only strong signal stations are received.

Preset scan/Eject switch
Press this switch in tuner mode to listen to the stations preset in 1 - 6 channel keys for about 5 seconds. When the required station is received, press the switch again or press the corresponding channel switch. When this switch is pressed during tape play, the cassette tape is ejected.

Channel keys (1 — 6)
These keys are used to store the frequencies of selected radio stations. Any 18 stations in F and 6 stations in AM can be held in memory.
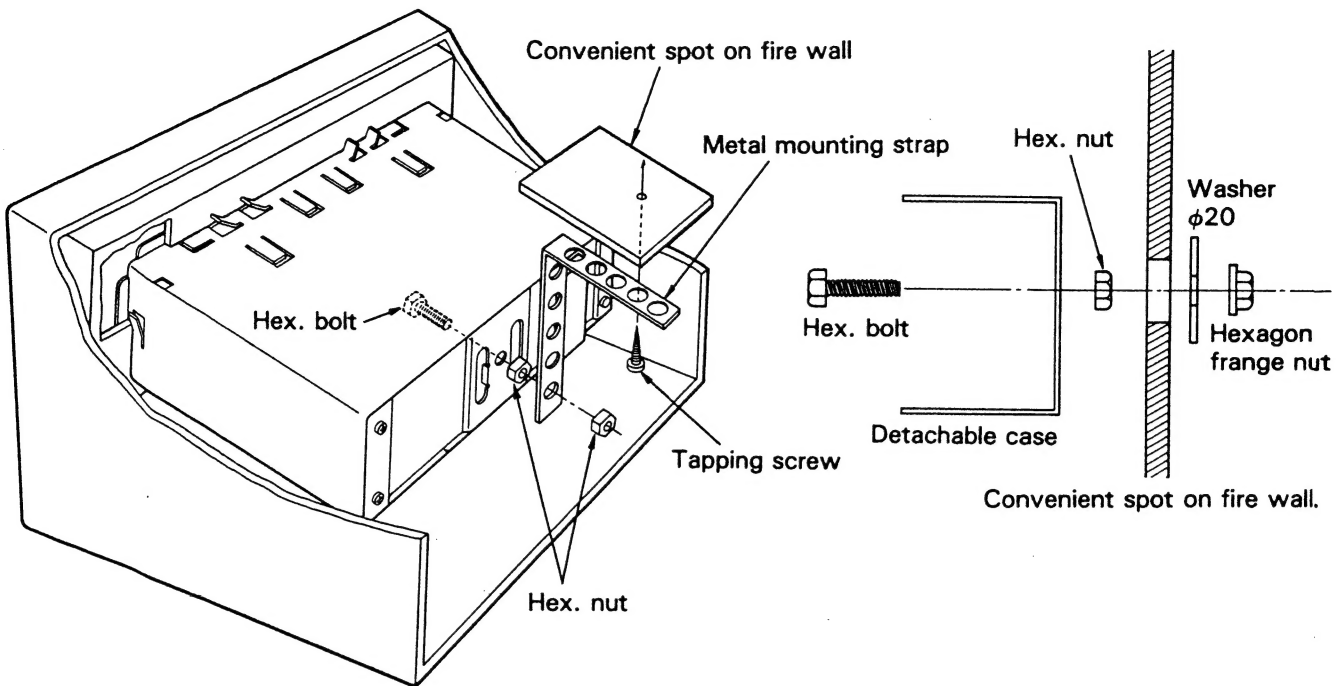
Tuning keys (△ UP/ ▽ DOWN)
When this key is pressed with the Auto/Manual selector set to auto, the unit automatically scans the frequency and stops when a marginal broadcast is received. In manual mode, press this key once to change the receiving frequency by 1 step. When this key is kept pressed, the frequency changes continuously.
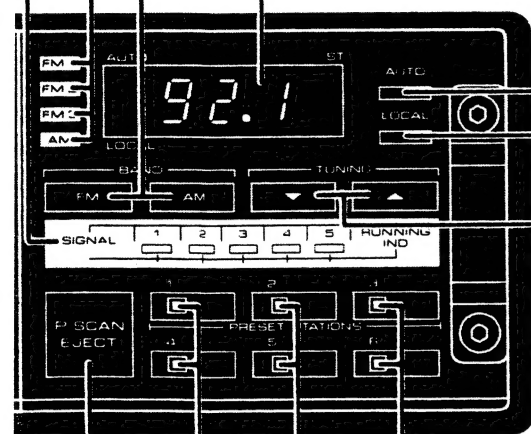
Installation

1. Insert the detachable case into the console and clamp with the claws. If the detachable case cannot be inserted, cut off the console with a file.

Convenient spot on fire wall

Metal mounting strap

Hex. nut

Washer φ20

Hex. bolt

Hex. bolt

Hexagon frange nut

Tapping screw

Detachable case

Hex. nut

Convenient spot on fire wall.

2. Insert the unit into the detachable case.

Push
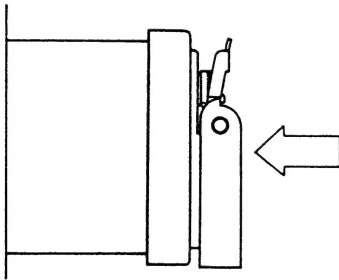
3. To remove the unit, press the lever located at the left of the handle to raise the handle, then pull out.

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Front

Preamp output voltage
selector

High 1 V

Normal 300 mV

The connector at the rear sometimes makes poor connection when the unit is detached frequently. Periodically wipe the connector with a cloth moistened with alcohol, etc.

Connection

To FM/AM anttena

Preout (To Main amplifier)

KRC-838

ACC   Key switch

Fuse box   Power supply lead (Red) ⊕ (To ignition)   Memory backup lead (Yellow) ⊕ (To battery)

Ground lead (Black) ⊖ (To car chassis)

Battery

Power anttena control lead (Blue)
(To fullautomatic power anttena)

Front left (Green) ⊕

Rear left (Blue) ⊕

LEFT

Common (White) ⊖

⊖

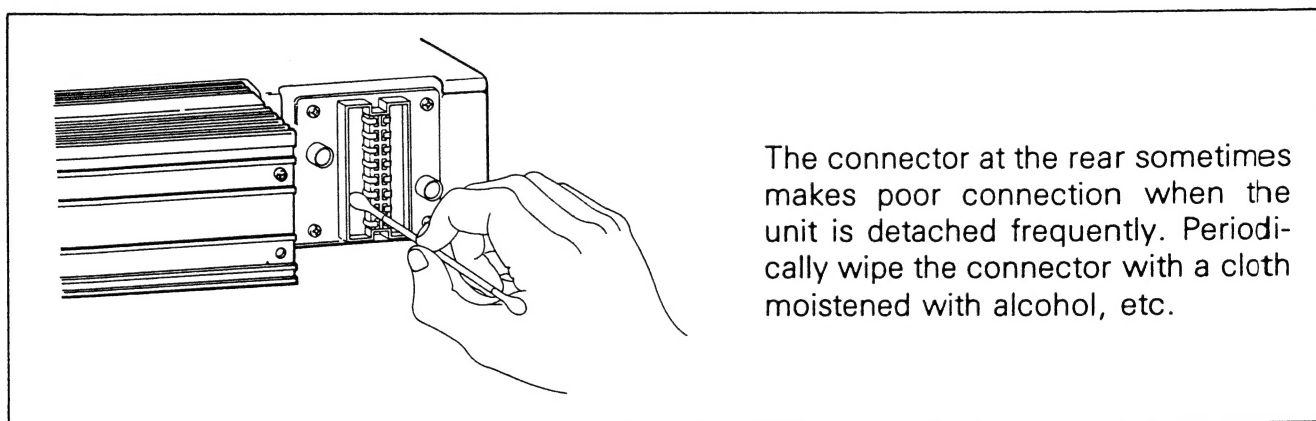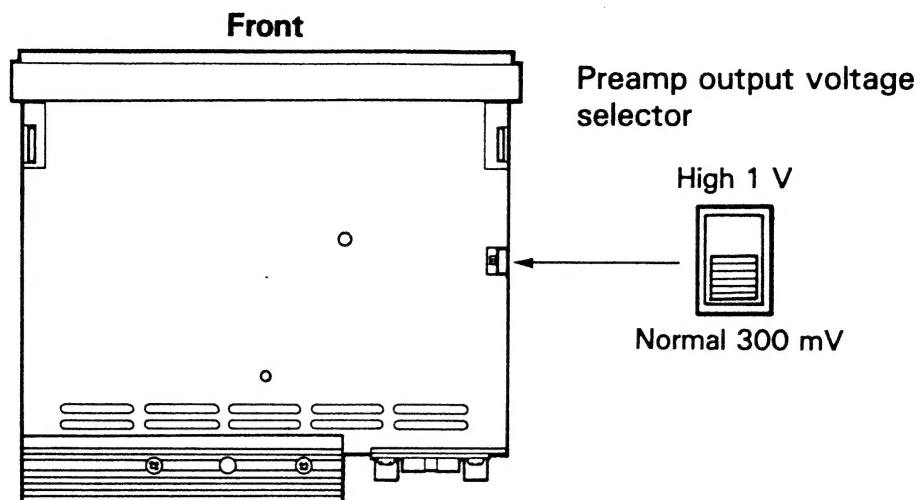Rear speaker   Front speaker

Front right (Orange) ⊕

Rear right (Red) ⊕

RIGHT

Common (Gray) ⊖

⊖

Rear speaker   Front speaker

- • As the unit uses BTL output, always connect the gray speaker wires to the ⊖ terminals of the speaker systems. Never let the gray speaker wires touch and never connect them to the chassis (ground). Do not let the speaker terminals come into contact with the chassis (ground).
  Insulate any unused output wire with vinyl tape to prevent a short circuit.

■ Fader control

When a 4-speaker system is constructed using the fader control, two types of operation are possible as follows.

Front speaker
(Green, Orange, White cables)
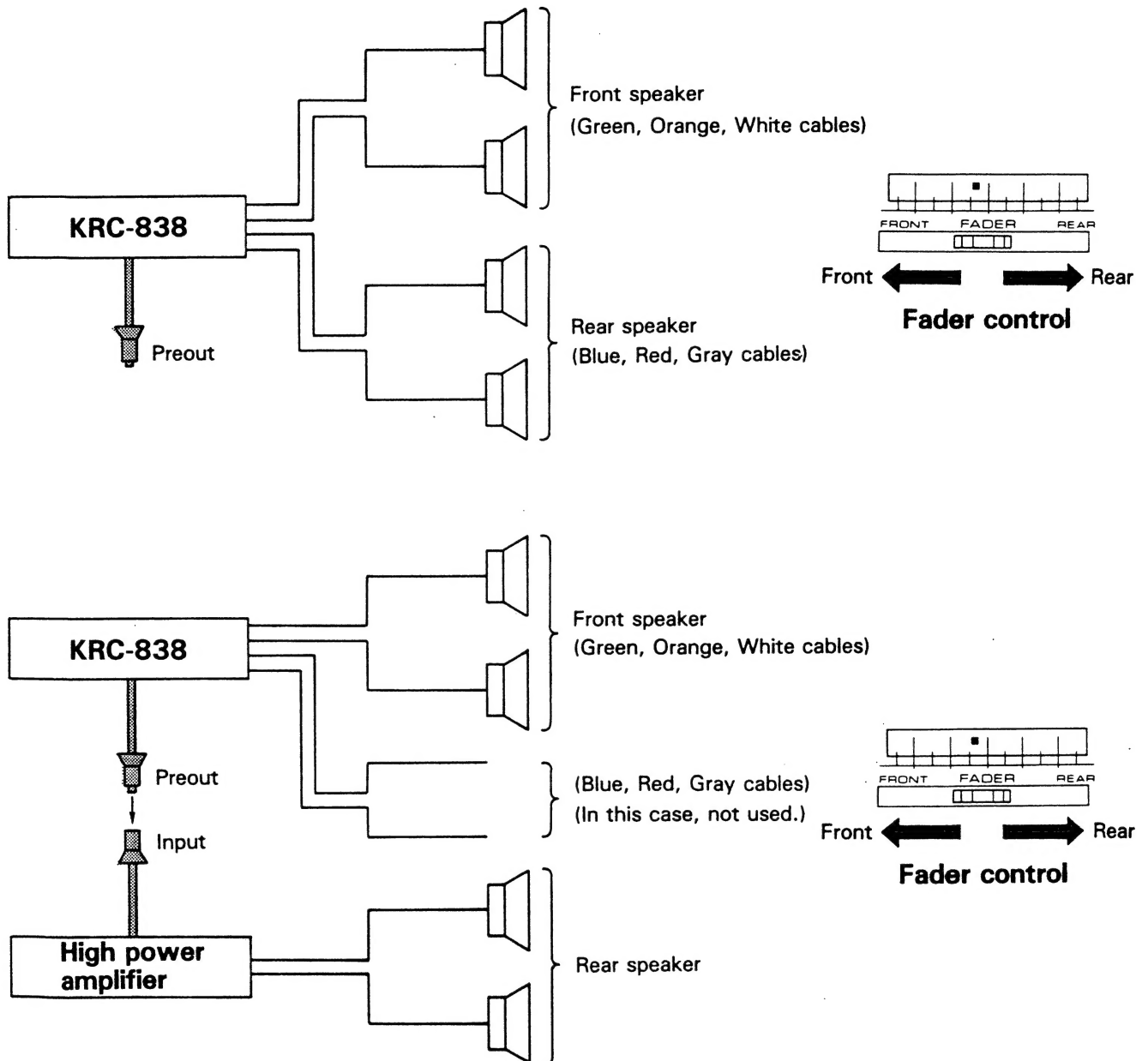
Rear speaker
(Blue, Red, Gray cables)

KRC-838

Preout

FRONT   FADER   REAR

Front ◄━━━ ━━━► Rear

Fader control

Front speaker
(Green, Orange, White cables)

(Blue, Red, Gray cables)
(In this case, not used.)

Rear speaker

KRC-838

Preout

Input

High power amplifier

FRONT   FADER   REAR

Front ◄━━━ ━━━► Rear

Fader control

• The built-in fader control is a preout fader. The operation of the fader control changes according to the connection as shown in Fig.

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Operation

■ Tape play

1. When a cassette is inserted with the tape on the right, playback starts.
2. Select the NR system and tape position according to the tape to be used.
3. When the play/program switch is depressed, playback of the reverse side of the tape starts.
4. To stop playback, depress the eject switch.

■ Tape advance

The non-recorded portion of the tape is detected to locate the beginning of the selection for playback.

1. If you want to hear the selection you are listening to again from the beginning, press the TAPE ADV switch, and then rewind. The tape will stop rewinding at the beginning of the selection, and playback will recommence.
2. If you want to hear the selection following the one you are listening to, press the TAPE ADV switch, and then fast forward. The tape will stop at the beginning of the next selection, and playback will recommence.
3. It should be noted that the TAPE ADV function may not work correctly in the following cases:
   — Tapes where the unrecorded space between selections is less than 5 seconds.
   — Tapes where selections include passages with low recording levels lasting longer than 5 seconds.

* By operating FF/REW when T-ADV is OFF, the unit will be switched over to the RADIO mode during FF/REW, in which the radio reception which has been actuated before listening to tape will be actuated again and all the functions of the radio will be operating.
* In T. ADV ON mode, the unit cannot be set to radio mode.

■ Index scanning operation

1. Load a tape and set the Index scan switch to ON. The indicator lights and the beginnings of tunes are played back in sequence (for approx. 10 seconds for each tune).
2. Index Scanning is released when the tape reaches the end.
3. When the beginning of the desired selection is being played back, press the switch again or press the PLAY/PROG switch to release the index scan mode and to set the unit to the normal play mode.

■ The KRC-838 incorporates Dolby NR B/C types

Dolby B type NR system

In general, Dolby NR refers to the B type noise reduction system. By encoding and decoding the higher frequency components of a small signal, the noise level can be reduced by a maximum of 10 dB.

Dolby C type NR system

The dynamic range is expanded by 10 dB compared with the B type noise reduction system. The anti-saturation circuit encodes and decodes higher level signals by a maximum of 3 dB to reduce distortion whent the input signal level is high.

DOLBY and the double-D symbol are trademarks of Dolby Laboratories Corporation.
•Dolby Noise reduction circuit made under license from Dolby Laboratories Licensing Corporation.

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■ Auto tuning (Seek)
1. Turn the power on.
2. Select AM or FM band.
3. Set the Auto/Manual selector to auto.
4. When the Up/Down key is pressed, the unit starts scanning. When a marginal broadcast is received, the scanning stops.

■ Manual tuning
1. Turn the power on.
2. Select AM or FM band.
3. Set the Auto/Manual selector to manual.
4. Press the Up/Down key to tune in the required frequency.

■ How to store the selected station frequency in the memory
1. Receive the required station.
2. Press the memory switch. The memory indicator lights up for about 5 seconds.
3. While the memory indicator is lit, press the required channel key.

■ How to perform preset scanning
1. Store a station frequency in any one of 1 to 6 channel keys.
2. When the preset scan switch is pressed, the station frequencies stored in memory by channel keys (1 — 6) are monitored in sequence for 5 seconds.
3. Press the preset scan switch at the required station once again or hold the channel key for continuous reception.

Care and maintenance

* The power source of this unit is exclusively DC 12 V, negative ground. If you wish to mount the unit on a vehicle with DC 24 V, please consult your appointed KENWOOD dealer.
* Do not place the cassette receiver in a place where the cassette receiver may be exposed to direct sunlight, heat or moisture. Be careful that metal objects and water do not enter the set.
* If you have difficulty in installing the set in your car, please contact your KENWOOD dealer.

Notes on handing tape
* Before loading a cassette, check the tape for slack. If there is slack tape, remove it using a pencil.
* Do not expose the cassette tape to direct sunlight. Leaving a cassette at high temperature or humidity can deform the cassette shell or tape.
* 120-minute tape is very thin. Avoid its use, because it can easily be twisted around the pinch roller.

Head cleaning
Magnetic particles from the tape adhere to the head surface after a long period of use, resulting in noise and poor quality sound. Clean the head with cleaning tape available at your stereo shop. Play cleaning tape only once per cleaning. Continuous us of some types of cleaning tapes may damage the head. Follow the directions enclosed with the head cleaner.

Specifications

Specification subject to change without notice. (*...EIA Standard)

FM Tuner Section

Frequency Range	87.9 MHz — 107.9 MHz
Channel Space	200 kHz
* Usable Sensitivity	14.8 dBf (1.5 μV/75 ohms)
* 50 dB Quieting Sensitivity	19.0 dBf (2.4 μV/75 ohms)
* Frequency Response	30 Hz — 15 kHz ±3 dB
Signal to Noise Ratio	70 dB
* Alternate Channel Selectivity	65 dB
* Capture Ratio	1.5 dB
* Image Response Ratio	70 dB
* IF Response Ratio	75 dB
* Stereo Separation (1 kHz)	40 dB

AM Tuner Section

Frequency Range	530 kHz — 1,620 kHz
Channel Space	10 kHz
Usable Sensitivity	30 dB (30 μV)

Cassette Deck Section

Tape Speed	4.76 cm/sec.
* Wow & Flutter	0.12% (WRMS)
Fast Winding Time	100 sec. (C-60)
* Frequency Response	30 Hz — 16 kHz ±3 dB (120 μs)
	30 Hz — 18 kHz ±3 dB (70 μs)
* Stero Separation (1 kHz)	37 dB
* Signal to Noise Ratio	NR OFF 58dB
	Dolby-B 67 dB
	Dolby-C 73 dB

Audio Section

Max. Output Power	18 W×2 into 4 ohms, 1 kHz
Power Output	14 W×2 into 4 ohms, 1 kHz, at 10% THD
	9 W×2 into 4 ohms, 20 Hz — 20 kHz at 1% THD
* Tone Action	Bass: 100 Hz±10dB
	Treble: 10kHz±10dB
* Preamp Output Voltage	Normal: 300 mV/10 k ohms Load
	High: 1.0 V/10 k ohms Load

General

Operating Volgtage	14.4 V (11 — 16 V allowable)
Current Consumption	4.5 A at Rated Power
Body Size	180×52×155 mm
	(7-1/16×2-1/16×6-1/8in.)
Weight	5.1 lbs (2.3 kg)